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 TITLE : BRANCHED TYPE OLIGONUCLEOTIDE



ABSTRACT : PROBLEM TO BE SOLVED: To obtain the subject new oligonucleotide, comprising a branched type oligonucleic acid prepared by a solid-phase phosphoramidite method using a pentaerythritol compound, capable of forming triple strands with various nucleic acids and useful as an antisense molecule, etc.

SOLUTION: This new branched type oligonucleotide is represented by formula I [R¹ and R² are each a DNA or an RNA; (n) is a number of 2-6] and is capable of forming a triple-stranded nucleic acid with various DNAs or RNAs and thereby useful as an antisense molecule for gene therapy, etc., according to an antisense method. The branched type oligonucleotide is readily obtained by synthesizing oligonucleotide chains in four directions according to a solid- phase phosphoramidite method using a pentaerythritol compound which is a new compound represented by formula II [Tr is a (substituted)trityl; A is a phosphate group, a phosphonate group or phosphoramidite group].

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